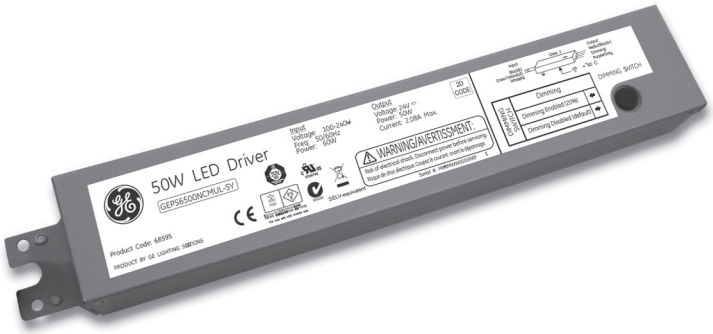
GE
Lighting

Installation Guide

IMMERSION™

LED Refrigerated Display Lighting

Vertical & Horizontal Cases



68595 50W LED Drivers

GEPS6500NCMUL-SY

BEFORE YOU BEGIN

Read these instructions completely and carefully.

FOR YOUR SAFETY

Read and observe all CAUTIONS and WARNINGS shown throughout these instructions.

- Installation to be performed by factory trained service personnel only.
- For use inside a commercial refrigeration case with packaged foods only.
- Use this unit only in the manner intended by the manufacturer. If you have any questions, contact the manufacturer.
- Before installing, servicing or cleaning unit, switch power off at the service panel and follow appropriate lock out/tag out safety procedures

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation. This Class [A] RFLD complies with the Canadian standard ICES-003. Ce DEFR de la classe [A] est conforme à la NMB-003 du Canada.

NOTE: This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

PREPARE ELECTRICAL WIRING

Electrical Requirements

- The power supply must be supplied with 100-240 VAC, 50/60 Hz, and connected to an individual properly grounded branch circuit, protected by a 15 or 20 ampere circuit breaker or time delay fuse.
- Wiring must be 2 wire with ground and rated for 75°C (167°F). All wiring must be done to NEC or local electrical codes.

Grounding Instructions–Cable Direct

- This lighting system must be connected to a grounded metal, permanent wiring system, or an equipment grounding conductor must be run with the circuit conductors and be connected to the equipment grounding terminal.

⚠ CAUTION/ATTENTION

Risk of injury. While performing installations described, gloves, safety glasses or goggles should be worn. / **Risque de blessure.** Lors de l'exécution des installations décrites, des gants, des lunettes de sécurité ou des lunettes de protection doivent être portées.

⚠ WARNING/AVERTISSMENT

Risk of electrical shock. Disconnect power before servicing or installing product. LED Retrofit Kit Installation requires knowledge of luminaires electrical systems. If not qualified, do not attempt installation. Contact a qualified electrician. Install this kit only in the luminaires that have the construction features and dimensions shown in the photographs and/or drawings. / **Risque de choc électrique.** Couper le courant avant de réparer ou installer le produit. LED Retrofit Kit d'installation nécessite la connaissance des systèmes luminaires électriques. Si vous n'êtes pas qualifié, ne tentez pas l'installation. Contactez un électricien qualifié. Installez ce kit seulement dans les luminaires qui ont les caractéristiques de construction et les dimensions figurant sur les photographies et / ou des dessins.

imagination at work

1 Connect LED Driver - Output

- For retrofit, place LED driver in the location where the ballast was formerly located.
- Make output (DC) connections as noted below:

OPTION 1 (OEM) – USING 4-WAY CONNECTOR

Connect the LED Driver output leads to the LED Light leads using the appropriate mating connector (Molex P/N 39-01-4046). Terminals installed should be crimped using approved tooling and process per Molex specifications. Ensure that the connector cavities are correctly populated per the wire cavity table on page 3. (A)

OPTION 2 (OEM or RETROFIT) – USING TWIST-ON WIRE CONNECTORS

Remove the 4-way connector from the LED Driver by cutting the wires near the connector and strip the output leads. Using the appropriate wiring diagram on page 3, connect the LED Driver output leads to the LED Light leads using wire connectors or other connection method approved for low temperature usage and stranded cable. (A)

For non-dimming applications, cap the unused wires with 5/32" (4mm) twist on wire connectors.

For Retrofit: Bundle and safely secure any unused wires by way of approved wire ties and wire connectors.

2 Connect LED Driver - Input

- Make input (AC) connections using one of the two options below:
- The LED Driver is required to be reliably bonded to the protective ground conductor. (B)

OPTION 1 (OEM) - USING 3-WAY CONNECTOR

Attach the supplied green/yellow ground wire from the LED Driver to a grounded metal portion of the door frame. Connect the original Line and neutral wires (or Line 1 and Line 2 wires for 240 nominal VAC) to the 3-way connector for the LED Driver input wires using the appropriate mating connector (Molex P/N 39-01-4030). Ensure that the connector cavities are correctly populated per the wire cavity table on p. 3. (C)

OPTION 2 (OEM or RETROFIT) – USING TWIST-ON WIRE CONNECTOR

Attach the supplied green/yellow ground wire from the LED Driver to a grounded metal portion of the door frame. Remove the 3-way connector from the LED Driver by cutting the wires near the connector and strip the input wires. Using the appropriate wiring diagram on page 3, connect the original Line and neutral wires (or Line 1 and Line 2 wires for 240 nominal VAC) to the LED Driver leads using twist lock wire connectors or other connection method approved for low temperature usage and stranded cable. Ensure that the connector cavities are correctly populated per wire cavity table on p. 3. (C)

3 Dimming /Occupancy Sensor Contacts – Output (Optional)

- To enable dimming operation and/or occupancy sensors you must connect leads from occupancy sensor or control system (normally open contact) to the purple and gray leads of the power supply and adjust dimming switch as shown below.

Note: connection of occupancy sensor to the dimming leads will reduce light output to 20% normal output.

- Make output (contact closure) connections as noted below:

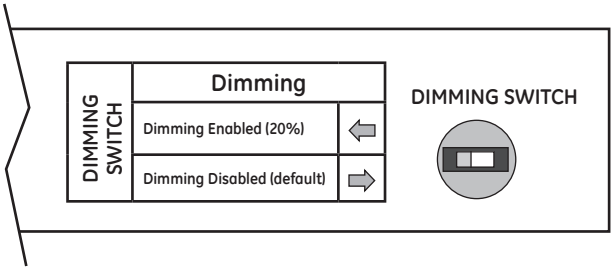
OPTION 1 (OEM) - USING 4-WAY CONNECTOR

Connect the LED Driver dimming output leads to the occupancy sensor or control system using the appropriate mating connector (Molex P/N 39-01-4046). Terminals installed should be crimped using approved tooling and process per Molex specifications. Ensure that the connector cavities are correctly populated per the wire cavity table on page 3. (D)

OPTION 2 (OEM or RETROFIT) – USING TWIST-ON WIRE CONNECTORS

Remove the 4-way connector from the LED Driver by cutting the wires near the connector and strip the output leads. Using the appropriate wiring diagram on page 3, connect the LED Driver dimming output leads to the occupancy sensor or control system using wire connectors or other connection method approved for low temperature usage and stranded cable. (D)

- The GEPS6500NCMUL-SY LED Driver is capable of step dimming from 100% power to 20% power when used with a normally open contact closure occupancy sensor system.
- When using the GEPS6500NCMUL-SY for dimming applications, the dimming switch setting must be switched to the left to enable the dimming feature. The following is the only recommended usage of occupancy sensors with the Immersion LED lighting system. Other methods, such as using occupancy sensors to switch the LED driver on and off is not recommended and will void the product warranty.



⚠WARNING/AVERTISSMENT

Risk of electrical shock. Ensure that all connection points are sealed for damp location using the appropriate method per the NEC or local electrical code. **Risque de choc électrique.** S'assurer que les points de raccordements sont scellés pour emplacement humide en employant une méthode permise par le NEC ou par le code électrique local.

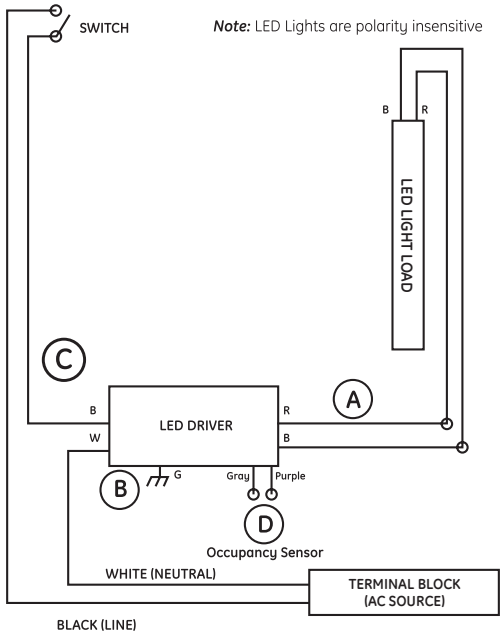
⚠CAUTION/ATTENTION

Risk of injury. Do not overload LED Driver, 50-watts maximum per driver. Do not exceed the LED light bar loading limits specified on the light bar installation instructions for a 50W driver. **Risque de blessure.** Ne pas surcharger l'alimentation à DEL. Maximum de 50 watts par alimentation. Ne pas excéder les limites de charge maximale des alimentations telles que spécifiées dans les instructions d'installation.

4 Connection Configurations

For information on A, B, C, D, see Steps 1, 2, and 3.
Refer to LED Light Bar installation instructions for LED light bar wiring configurations.

Typical Installation



Wire Cavities
39-01-4030 (AC)
Cavity 1 - Line 1 (Black) Cavity 2 - Earth Ground (Green) Cavity 3 - Neutral or Line 2 (White)
39-01-4046 (DC)
Cavity 1 - Output DC (+) (Red) Cavity 2 - Output DC (-) (Black) Cavity 3 - Dimming (Purple) Cavity 4 - Dimming (Gray)

This product is intended to be used as a lamp control gear that is installed after the mains control switch.

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